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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/018,892

DATE: 08/30/2002
TIME: 15:38:02

Input Set : A:\2577-112.txt
Output Set: N:\CRF4\08302002\J018892.raw

3 <110> APPLICANT: Kwang, Hwei-Sing
4 Liu, Wei
5 Low, Su-Shing Sharon
6 Loh, Hilda Kwanyeng
8 <120> TITLE OF INVENTION: Detection of *Salmonella Enteritidis*
10 <130> FILE REFERENCE: 2577-112
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/018,892
C--> 12 <141> CURRENT FILING DATE: 2002-08-06
12 <150> PRIOR APPLICATION NUMBER: PCT/SG99/00061
13 <151> PRIOR FILING DATE: 1999-06-22
15 <160> NUMBER OF SEQ ID NOS: 19
17 <170> SOFTWARE: PatentIn version 3.1
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 505
21 <212> TYPE: DNA
22 <213> ORGANISM: *Salmonella enteritidis*
24 <400> SEQUENCE: 1
25 attttgtaat atgcgttaat cagcatctgc agtagcagtt cttgcttaa ttgcattgtgg 60
27 cagtgcac cgcagctggct ttgttggtaa caaagcagag gttcaggcag cggttactat 120
29 tgccatctca aatacaacat cagccaaactg gagtcaggat cctggctta cagggcctgc 180
31 ttgttgcgtct ggtcagaaag ttggtaactt cagcattact gctactggc cacataactc 240
33 agtatctatt gcaggtaaag gggcttcggg atctgggtggt gtagccactg tcccggtcg 300
35 ttagggacaa ggacagcctg tttccgtgg gcgtattcag ggagccaata ttaatgacca 360
37 agcaaataact ggaattgacg ggcttgcagg ttggcgagtt gccagctctc aagaaacgct 420
39 aaatgtccct gtcacaaacct ttggtaaatac gaccctgcca gcaggtactt tcactgcgac 480
41 cttctacgtt cagcagtatc aaaac 505
44 <210> SEQ ID NO: 2
45 <211> LENGTH: 165
46 <212> TYPE: PRT
47 <213> ORGANISM: *Salmonella enteritidis*
49 <400> SEQUENCE: 2
51 Met Arg Lys Ser Ala Ser Ala Val Ala Val Leu Ala Leu Ile Ala Cys
52 1 5 10 15
55 Gly Ser Ala His Ala Ala Gly Phe Val Gly Asn Lys Ala Glu Val Gln
56 20 25 30
59 Ala Ala Val Thr Ile Ala Ala Gln Asn Thr Thr Ser Ala Asn Trp Ser
60 35 40 45
63 Gln Asp Pro Gly Phe Thr Gly Pro Ala Val Ala Ala Gly Gln Lys Val
64 50 55 60
67 Gly Thr Leu Ser Ile Thr Ala Thr Gly Pro His Asn Ser Val Ser Ile
68 65 70 75 80
71 Ala Gly Lys Gly Ala Ser Val Ser Gly Gly Val Ala Thr Val Pro Phe
72 85 90 95

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75 Val Asp Gly Gln Gly Gln Pro Val Phe Arg Gly Arg Ile Gln Gly Ala
76 100 105 110
79 Asn Ile Asn Asp Gln Ala Asn Thr Gly Ile Asp Gly Leu Ala Gly Trp
80 115 120 125
83 Arg Val Ala Ser Ser Gln Glu Thr Leu Asn Val Pro Val Thr Thr Phe
84 130 135 140
87 Gly Lys Ser Thr Leu Pro Ala Gly Thr Phe Thr Ala Thr Phe Tyr Val
88 145 150 155 160
91 Gln Gln Tyr Gln Asn
92 165
95 <210> SEQ ID NO: 3
96 <211> LENGTH: 128
97 <212> TYPE: PRT
98 <213> ORGANISM: Salmonella enteritidis
100 <400> SEQUENCE: 3
102 Ala Ala Gln Asn Thr Thr Ser Ala Asn Trp Ser Gln Asp Pro Gly Phe
103 1 5 10 15
106 Thr Gly Pro Ala Val Ala Ala Gly Gln Lys Val Gly Thr Leu Ser Ile
107 20 25 30
110 Thr Ala Thr Gly Pro His Asn Ser Val Ser Ile Ala Gly Lys Gly Ala
111 35 40 45
114 Ser Val Ser Gly Gly Val Ala Thr Val Pro Phe Val Asp Gly Gln Gly
115 50 55 60
118 Gln Pro Val Phe Arg Gly Arg Ile Gln Gly Ala Asn Ile Asn Asp Gln
119 65 70 75 80
122 Ala Asn Thr Gly Ile Asp Gly Leu Ala Gly Trp Arg Val Ala Ser Ser
123 85 90 95
126 Gln Glu Thr Leu Asn Val Pro Val Thr Thr Phe Gly Lys Ser Thr Leu
127 100 105 110
130 Pro Ala Gly Thr Phe Thr Ala Thr Phe Tyr Val Gln Gln Tyr Gln Asn
131 115 120 125
134 <210> SEQ ID NO: 4
135 <211> LENGTH: 493
136 <212> TYPE: PRT
137 <213> ORGANISM: Salmonella enteritidis
139 <400> SEQUENCE: 4
141 Leu Thr Gln Asn Asn Leu Asn Lys Ser Gln Ser Ser Leu Ser Ser Ala
142 1 5 10 15
145 Ile Glu Arg Leu Ser Ser Gly Leu Arg Ile Asn Ser Ala Lys Asp Asp
146 20 25 30
149 Ala Ala Gly Gln Ala Ile Ala Asn Arg Phe Thr Ser Asn Ile Lys Gly
150 35 40 45
153 Leu Thr Gln Ala Ser Arg Asn Ala Asn Asp Gly Ile Ser Ile Ala Gln
154 50 55 60
157 Thr Thr Glu Gly Ala Leu Asn Glu Ile Asn Asn Asn Leu Gln Arg Val
158 65 70 75 80
161 Arg Glu Leu Ser Val Gln Ala Thr Asn Gly Thr Asn Ser Asp Ser Asp
162 85 90 95
165 Leu Lys Ser Ile Gln Asp Glu Ile Gln Gln Arg Leu Glu Glu Ile Asp

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166	100	105	110	
169	Arg Val Ser Asn Gln Thr Gln Phe Asn Gly Val Lys Val Leu Ser Gln			
170	115	120	125	
173	Asp Asn Gln Met Lys Ile Gln Val Gly Ala Asn Asp Gly Glu Thr Ile			
174	130	135	140	
177	Thr Ile Asp Leu Gln Lys Ile Asp Val Lys Ser Leu Gly Leu Asp Gly			
178	145	150	155	160
181	Phe Asn Val Asn Gly Pro Lys Glu Ala Thr Val Gly Asp Leu Lys Ser			
182	165	170	175	
185	Ser Phe Lys Asn Val Thr Gly Tyr Asp Thr Tyr Ala Ala Gly Ala Asp			
186	180	185	190	
189	Lys Tyr Arg Val Asp Ile Asn Ser Gly Ala Val Val Thr Asp Ala Ala			
190	195	200	205	
193	Ala Pro Asp Lys Val Tyr Val Asn Ala Ala Asn Gly Gln Leu Thr Thr			
194	210	215	220	
197	Asp Asp Ala Glu Asn Asn Thr Ala Val Asp Leu Phe Lys Thr Thr Lys			
198	225	230	235	240
201	Ser Thr Ala Gly Thr Ala Glu Ala Lys Ala Ile Arg Gly Ala Ile Lys			
202	245	250	255	
205	Gly Gly Lys Glu Gly Asp Thr Phe Asp Tyr Lys Gly Val Thr Phe Thr			
206	260	265	270	
209	Ile Asp Thr Lys Thr Gly Asp Asp Gly Asn Gly Lys Val Ser Thr Thr			
210	275	280	285	
213	Ile Asn Gly Glu Lys Val Thr Leu Thr Val Ala Asp Ile Ala Thr Gly			
214	290	295	300	
217	Ala Thr Asp Val Asn Ala Ala Thr Leu Gln Ser Ser Lys Asn Val Tyr			
218	305	310	315	320
221	Thr Ser Val Val Asn Gly Gln Phe Thr Phe Asp Asp Lys Thr Lys Asn			
222	325	330	335	
225	Glu Ser Ala Lys Leu Ser Asp Leu Glu Ala Asn Asn Ala Val Lys Gly			
226	340	345	350	
229	Glu Ser Lys Ile Thr Val Asn Gly Ala Glu Tyr Thr Ala Asn Ala Thr			
230	355	360	365	
233	Gly Asp Lys Ile Thr Leu Ala Gly Lys Thr Met Phe Ile Asp Lys Thr			
234	370	375	380	
237	Ala Ser Gly Val Ser Thr Leu Ile Asn Glu Asp Ala Ala Ala Ala Lys			
238	385	390	395	400
241	Lys Ser Thr Ala Asn Pro Leu Ala Ser Ile Asp Ser Ala Leu Ser Lys			
242	405	410	415	
245	Val Asp Ala Val Arg Ser Ser Leu Gly Ala Ile Gln Asn Arg Phe Asp			
246	420	425	430	
249	Ser Ala Ile Thr Asn Leu Gly Asn Thr Val Thr Asn Leu Asn Ser Ala			
250	435	440	445	
253	Arg Ser Arg Ile Glu Asp Ala Asp Tyr Ala Thr Glu Val Ser Asn Met			
254	450	455	460	
257	Ser Lys Ala Gln Ile Leu Gln Gln Ala Gly Thr Ser Val Leu Ala Gln			
258	465	470	475	480
261	Ala Asn Gln Val Pro Gln Asn Val Leu Ser Leu Leu Arg			
262	485	490		

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265 <210> SEQ ID NO: 5
266 <211> LENGTH: 90
267 <212> TYPE: PRT
268 <213> ORGANISM: *Salmonella enteritidis*
270 <400> SEQUENCE: 5
272 Thr Ala Glu Ala Lys Ala Ile Arg Gly Ala Ile Lys Gly Gly Lys Glu
273 1 5 10 15
276 Gly Asp Thr Phe Asp Tyr Lys Gly Val Thr Phe Thr Ile Asp Thr Lys
277 20 25 30
280 Thr Gly Asp Asp Gly Asn Gly Lys Val Ser Thr Thr Ile Asn Gly Glu
281 35 40 45
284 Lys Val Thr Leu Thr Val Ala Asp Ile Ala Thr Gly Ala Thr Asp Val
285 50 55 60
288 Asn Ala Ala Thr Leu Gln Ser Ser Lys Asn Val Tyr Thr Ser Val Val
289 65 70 75 80
292 Asn Gly Gln Phe Thr Phe Asp Asp Lys Thr
293 85 90
296 <210> SEQ ID NO: 6
297 <211> LENGTH: 69
298 <212> TYPE: PRT
299 <213> ORGANISM: *Salmonella enteritidis*
301 <400> SEQUENCE: 6
303 Lys Glu Gly Asp Thr Phe Asp Tyr Lys Gly Val Thr Phe Thr Ile Asp
304 1 5 10 15
307 Thr Lys Thr Gly Asp Asp Gly Asn Gly Lys Val Ser Thr Thr Ile Asn
308 20 25 30
311 Gly Glu Lys Val Thr Leu Thr Val Ala Asp Ile Ala Thr Gly Ala Thr
312 35 40 45
315 Asp Val Asn Ala Ala Thr Leu Gln Ser Ser Lys Asn Val Tyr Thr Ser
316 50 55 60
319 Val Val Asn Gly Gln
320 65
323 <210> SEQ ID NO: 7
324 <211> LENGTH: 40
325 <212> TYPE: PRT
326 <213> ORGANISM: *Salmonella enteritidis*
328 <400> SEQUENCE: 7
330 Lys Thr Gly Asp Asp Gly Asn Gly Lys Val Ser Thr Thr Ile Asn Gly
331 1 5 10 15
334 Glu Lys Val Thr Leu Thr Val Ala Asp Ile Ala Thr Gly Ala Thr Asp
335 20 25 30
338 Val Asn Ala Ala Thr Leu Gln Ser
339 35 40
342 <210> SEQ ID NO: 8
343 <211> LENGTH: 27
344 <212> TYPE: PRT
345 <213> ORGANISM: *Salmonella enteritidis*
347 <400> SEQUENCE: 8
349 Asp Gly Asn Gly Lys Val Ser Thr Thr Ile Asn Gly Glu Lys Val Thr

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350 1 5 10 15
353 Leu Thr Val Ala Asp Ile Ala Thr Gly Ala Thr
354 20 25
357 <210> SEQ ID NO: 9
358 <211> LENGTH: 11
359 <212> TYPE: PRT
360 <213> ORGANISM: Salmonella enteritidis
362 <400> SEQUENCE: 9
364 Ser Thr Thr Ile Asn Gly Glu Lys Val Thr Leu
365 1 5 10
368 <210> SEQ ID NO: 10
369 <211> LENGTH: 22
370 <212> TYPE: DNA
371 <213> ORGANISM: Artificial Sequence
373 <220> FEATURE:
374 <223> OTHER INFORMATION: Forward Primer for the C128 fragment of the fimbrial SEF14
antige
375 n
377 <400> SEQUENCE: 10
378 tgcagctca g aatacaacat ca 22
381 <210> SEQ ID NO: 11
382 <211> LENGTH: 21
383 <212> TYPE: DNA
384 <213> ORGANISM: Artificial Sequence
386 <220> FEATURE:
387 <223> OTHER INFORMATION: Reverse Primer for the C128 fragment of the fimbrial SEF14
antige
388 n
390 <400> SEQUENCE: 11
391 gttttgatac tgctgaacgt a 21
394 <210> SEQ ID NO: 12
395 <211> LENGTH: 26
396 <212> TYPE: DNA
397 <213> ORGANISM: Artificial Sequence
399 <220> FEATURE:
400 <223> OTHER INFORMATION: Forward Primer
402 <400> SEQUENCE: 12
403 aaggatccaa aggtggtaag gaagga 26
406 <210> SEQ ID NO: 13
407 <211> LENGTH: 26
408 <212> TYPE: DNA
409 <213> ORGANISM: Artificial Sequence
411 <220> FEATURE:
412 <223> OTHER INFORMATION: Reverse Primer
414 <400> SEQUENCE: 13
415 ccgaattctt tgtcaccgtt cactac 26
418 <210> SEQ ID NO: 14
419 <211> LENGTH: 26
420 <212> TYPE: DNA
421 <213> ORGANISM: Artificial Sequence
423 <220> FEATURE:

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/018,892

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Input Set : A:\2577-112.txt
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L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date